



Tesla Model X
Standard Safety Equipment

2019



Adult Occupant



98%

Child Occupant



81%

Vulnerable Road Users



72%

Safety Assist



94%

SPECIFICATION

Tested Model	Tesla Model X Long Range, LHD
Body Type	- 5 door SUV
Year Of Publication	2019
Kerb Weight	2460kg
VIN From Which Rating Applies	- 5YJXCCE44LF226616
Class	Large Off-Road

SAFETY EQUIPMENT

	Driver	Passenger	Rear
FRONTAL CRASH PROTECTION			
Frontal airbag	●	●	✘
Belt pretensioner	●	●	●
Belt loadlimiter	●	●	●
Knee airbag	✘	✘	✘
SIDE CRASH PROTECTION			
Side head airbag	●	●	●
Side chest airbag	●	●	●
Side pelvis airbag	●	●	●

Version 051219

SAFETY EQUIPMENT (NEXT)

	Driver	Passenger	Rear
CHILD PROTECTION			
Isofix	—	✗	●
Integrated CRS	—	✗	✗
Airbag cut-off switch	—	●	—
SAFETY ASSIST			
Seat Belt Reminder	●	●	●

OTHER SYSTEMS	
Active Bonnet (Hood)	●
AEB Pedestrian	●
AEB Cyclist	●
AEB City	●
AEB Inter-Urban	●
Speed Assistance System	●
Lane Assist System	●

Note: Other equipment may be available on the vehicle but was not considered in the test year.

- Fitted to the vehicle as standard ○ Fitted to the vehicle as part of the safety pack
- Not fitted to the test vehicle but available as option or as part of the safety pack ✗ Not available — Not applicable

 ADULT OCCUPANT

Total 37.5 Pts / 98%

 GOOD  ADEQUATE  MARGINAL  WEAK  POOR


Frontal Offset Deformable Barrier 8 / 8 Pts



Passenger Driver

Detailed description: This panel shows two crash test dummies. The Passenger dummy is wearing a yellow vest (Adequate) and is seated in a car seat. The Driver dummy is wearing a green vest (Good) and is seated in a car seat with a steering wheel. Both dummies are facing forward.

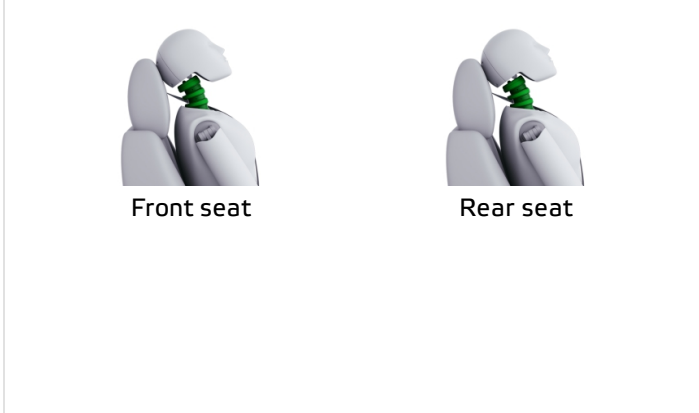
Frontal Full Width 7.8 / 8 Pts



Rear Passenger Driver

Detailed description: This panel shows two crash test dummies. The Rear Passenger dummy is wearing a yellow vest (Adequate) and is seated in a car seat. The Driver dummy is wearing a green vest (Good) and is seated in a car seat with a steering wheel. Both dummies are facing forward.

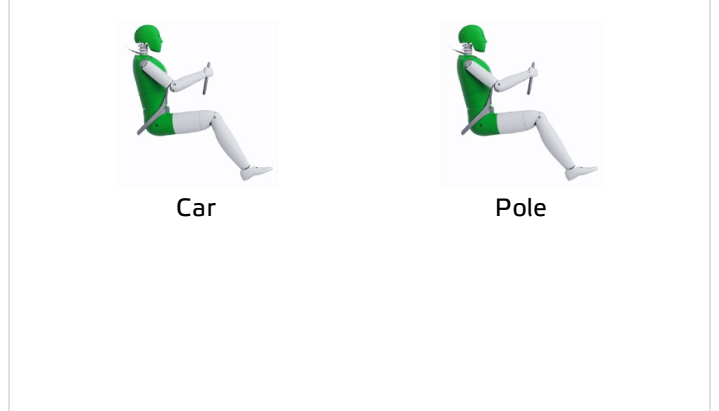
Whiplash Rear Impact 1.7 / 2 Pts



Front seat Rear seat

Detailed description: This panel shows two crash test dummies from a rear perspective. The Front seat dummy is wearing a green vest (Good) and is seated in a car seat. The Rear seat dummy is wearing a green vest (Good) and is seated in a car seat. Both dummies are facing forward.

Lateral Impact 16 / 16 Pts



Car Pole

Detailed description: This panel shows two crash test dummies from a side perspective. The Car dummy is wearing a green vest (Good) and is seated in a car seat. The Pole dummy is wearing a green vest (Good) and is seated in a car seat. Both dummies are facing forward.

 ADULT OCCUPANT

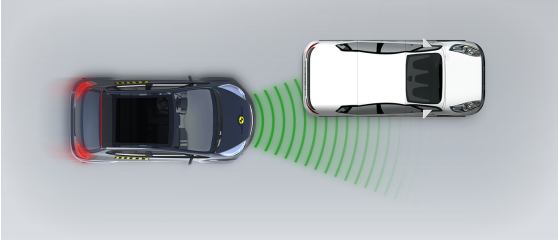
Total 37.5 Pts / 98%

 GOOD  ADEQUATE  MARGINAL  WEAK  POOR

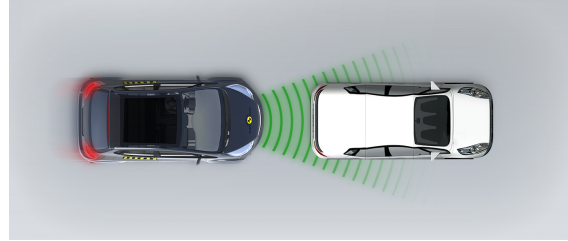
AEB City

 4 / 4 Pts

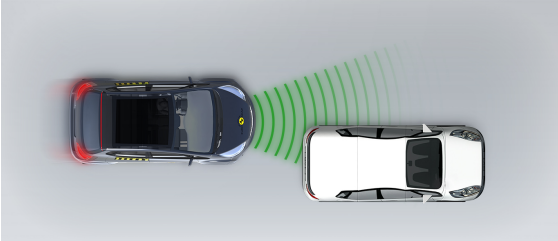
Approaching a stationary car: Left Offset



Approaching a stationary car: No Offset



Approaching a stationary car: Right Offset



 ADULT OCCUPANT

Total 37.5 Pts / 98%

Comments

The passenger compartment of the Model X remained stable in the frontal offset test. Dummy readings indicated good protection of the knees and femurs of the driver and passenger. Tesla showed that a similar level of protection would be provided to occupants of different sizes and to those sitting in different positions. Protection was rated as good for all critical body areas for the driver. This was also the case in the the full-width rigid barrier test, and protection was good or adequate for the rear passenger. In both the side barrier and the more severe side pole tests, protection of all critical body areas was good and the car scored full points in both of these tests. Tests on the front seats and head restraints demonstrated good protection against whiplash injuries in the event of a rear-end collision. A geometric assessment of the rear seats also indicated good whiplash protection. The standard-fit autonomous emergency braking (AEB) system performed well in tests of its functionality at the low speeds at which many whiplash injuries occur, with collisions avoided in all test scenarios.

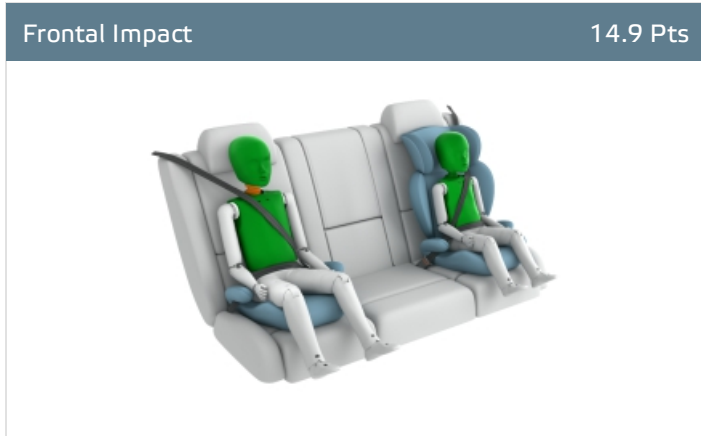
CHILD OCCUPANT

Total 39.9 Pts / 81%

■ GOOD
 ■ ADEQUATE
 ■ MARGINAL
 ■ WEAK
 ■ POOR

Crash Test Performance based on 6 & 10 year old children

22.9 / 24 Pts



Restraint for 6 year old child: *Britax Römer KidFix²*
 Restraint for 10 year old child: *Booster Cushion*

Safety Features

6 / 13 Pts

	Front Passenger	2nd row outboard	2nd row center	3rd row outboard *
Isofix	✗	●	✗	✗
i-Size	✗	●	✗	✗
Integrated CRS	✗	✗	✗	✗

* Third row seats available as option

● Fitted to test car as standard
 ○ Not on test car but available as option
 ✗ Not available

CRS Installation Check

11 / 12 Pts

- Install without problem
- Install with care
- Safety critical problem
- ✗ Installation not allowed

i-Size CRS

Maxi Cosi 2way Pearl & 2wayFix (rearward) (iSize)



Maxi Cosi 2way Pearl & 2wayFix (forward) (iSize)



BeSafe iZi Kid X2 i-Size (iSize)



BeSafe iZi Flex FIT i-Size (iSize)



ISOFIX CRS

Maxi Cosi Cabriofix & FamilyFix (ISOFIX)



BeSafe iZi Kid X4 ISOfix (ISOFIX)



Britax Römer Duo Plus (ISOFIX)



Britax Römer KidFix XP (ISOFIX)



 CHILD OCCUPANT

Total 39.9 Pts / 81%

■ Universal Belted CRS

Maxi Cosi Cabriofix (Belt)



Maxi Cosi Cabriofix & EasyBase2 (Belt)



Britax Römer King II LS (Belt)



Britax Römer KidFix XP (Belt)



CHILD OCCUPANT

Total 39.9 Pts / 81%

	Seat Position					
	Front	2nd row			3rd row	
	PASSENGER	LEFT	CENTER	RIGHT	LEFT	RIGHT
Maxi Cosi 2way Pearl & 2wayFix (rearward) (iSize)	□	●	□	●	□	□
Maxi Cosi 2way Pearl & 2wayFix (forward) (iSize)	□	●	□	●	□	□
BeSafe iZi Kid X2 i-Size (iSize)	□	●	□	●	□	□
BeSafe iZi Flex FIT i-Size (iSize)	□	●	□	●	□	□
Maxi Cosi Cabriofix & FamilyFix (ISOFIX)	□	●	□	●	□	□
BeSafe iZi Kid X4 ISOfix (ISOFIX)	□	●	□	●	□	□
Britax Römer Duo Plus (ISOFIX)	□	●	□	●	□	□
Britax Römer KidFix XP (ISOFIX)	□	●	□	●	□	□
Maxi Cosi Cabriofix (Belt)	●	●	●	●	●	●
Maxi Cosi Cabriofix & EasyBase2 (Belt)	●	●	●	●	✘	✘
Britax Römer King II LS (Belt)	●	●	●	●	●	●
Britax Römer KidFix XP (Belt)	●	●	●	●	●	●

● Install without problem
 ● Install with care
 ● Safety critical problem
 ✘ Installation not allowed

Comments

In the frontal offset test, protection of the neck of the 10 year dummy was marginal, based on readings of neck forces. Otherwise, in both the frontal and side barrier tests, protection of all critical body areas was good for both dummies. The front passenger airbag can be disabled to allow a rearward-facing child restraint to be used in that seating position. Clear information is provided to the driver regarding the status of the airbag and the system was rewarded. There is not enough room to install a universal child restraint in the optional third row seats and to use the second row seats in their normal positions. Accordingly, the restraint installation test was failed for the third row seats. Otherwise, the restraints for which the Model X is designed could be properly installed and accommodated in the car.

VULNERABLE ROAD USERS

Total 35.0 Pts / 72%

GOOD
 ADEQUATE
 MARGINAL
 WEAK
 POOR

Pedestrian	23.5 / 36 Pts						
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">Head Impact</td> <td style="text-align: right; padding: 5px;">17.4 Pts</td> </tr> <tr> <td style="padding: 5px;">Pelvis Impact</td> <td style="text-align: right; padding: 5px;">0.1 Pts</td> </tr> <tr> <td style="padding: 5px;">Leg Impact</td> <td style="text-align: right; padding: 5px;">6 Pts</td> </tr> </table>	Head Impact	17.4 Pts	Pelvis Impact	0.1 Pts	Leg Impact	6 Pts
Head Impact	17.4 Pts						
Pelvis Impact	0.1 Pts						
Leg Impact	6 Pts						

Vulnerable Road Users	11.6 / 12 Pts
System Name	Collision Avoidance Assist
Type	Auto-Brake with Forward Collision Warning
Operational From	8 km/h

Comments

The Model X has an active, deployable bonnet. Sensors in the bumper detect when a pedestrian has been struck and actuators lift the bonnet surface to provide greater clearance to the stiff structures in the engine compartment. Tesla showed that the system worked robustly for different pedestrian statures and across a wide range of speeds, so tests were performed with the bonnet in the raised position. Protection was good or adequate at almost all test locations on the bonnet. The bumper provided good protection to pedestrians' legs but protection of the pelvis was poor. The Model X's AEB system can detect vulnerable road users like pedestrians and cyclists, as well as other vehicles. In tests of its response to pedestrians, the system's performed well, with collisions avoided or mitigated in most cases. In tests of its response to cyclists, the system scored maximum points, with collisions avoided in all test scenarios.

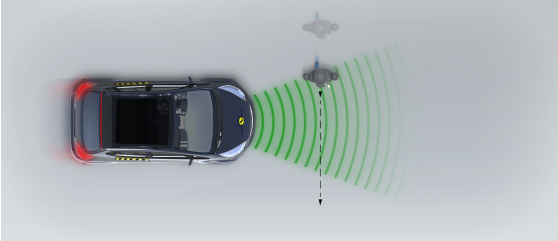
 VULNERABLE ROAD USERS

Total 35.0 Pts / 72%

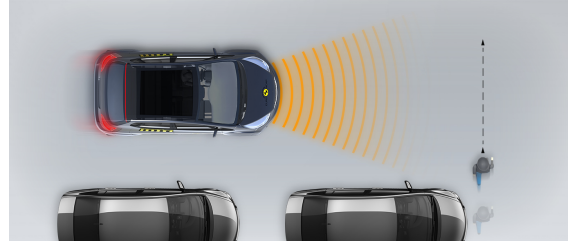
AEB Pedestrian 

■ Day time

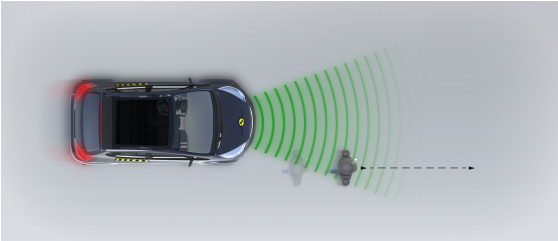
Adult crossing the road



Child running from behind parked vehicles



Adult along the roadside

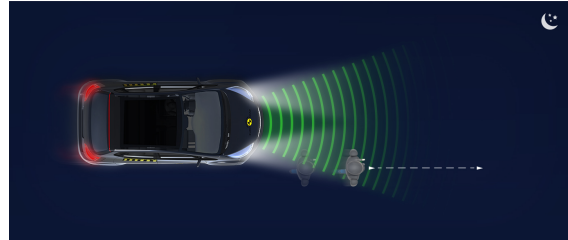


■ Night time

Adult crossing the road

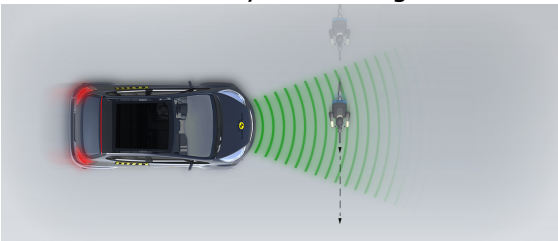


Adult along the roadside

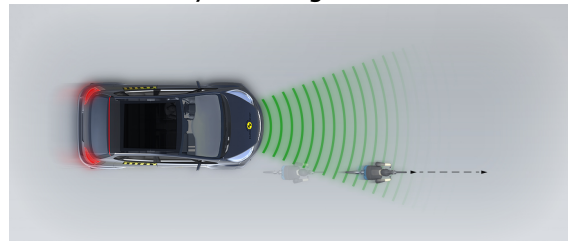


AEB Cyclist 

Cyclist crossing



Cyclist along the roadside



SAFETY ASSIST

Total 12.3 Pts / 94%

■ GOOD
 ■ ADEQUATE
 ■ MARGINAL
 ■ WEAK
 ■ POOR

Speed Assistance

■ 2.9 / 3 Pts

System Name	Speed Assist
Speed Limit Information Function	Map based
Speed Limitation Function	System advised (accurate to 5km/h)

Seat Belt Reminder

■ 3 / 3 Pts

Applies To	All Seats		
	Driver Seat	front passenger(s)	rear passenger(s)
Warning			
Visual	●	●	●
Audible	●	●	●
Occupant detection	—	●	●

● Pass
 ● Fail
 — Not available

Lane Support

■ 4 / 4 Pts


System Name	Lane Assist
Type	ELK + LKA (including LDW)
Operational From	40 km/h

PERFORMANCE	
Emergency Lane Keeping	■ GOOD
Lane Keep Assist	■ GOOD
Human Machine Interface	■ GOOD

 SAFETY ASSIST

Total 12.3 Pts / 94%

AEB Inter-Urban

 2.4 / 3 Pts

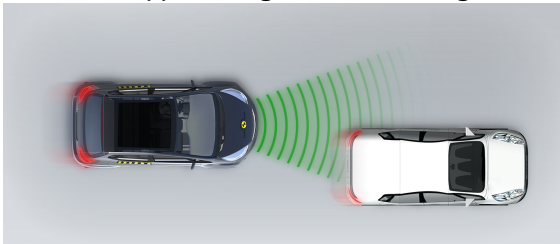
System Name	Collision Avoidance Assist
Type	Autonomous Emergency Braking and Forward Collision Warning
Operational From	8 km/h

Comments

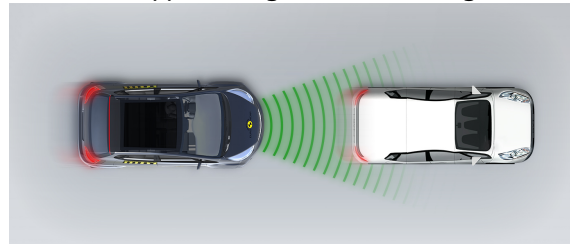
The Model X has a seatbelt reminder system for the front and rear seats. The AEB system performed well in tests of its response to other vehicles at highway speeds. A lane support system helps prevent inadvertent drifting out of lane and also intervenes in some more critical situations. A speed assistance system uses a camera and digital mapping to identify the local limit and the driver can choose to allow the car to adjust the speed limiter accordingly.

■ Autobrake function only

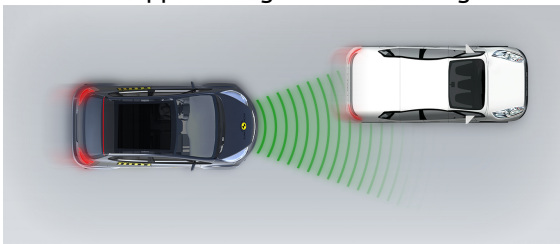
Approaching a slower moving car



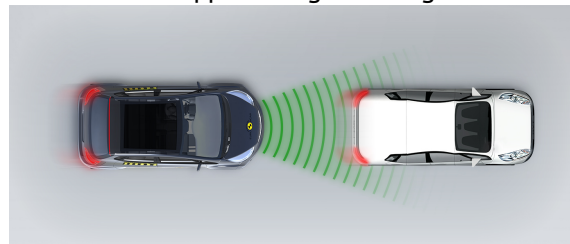
Approaching a slower moving car



Approaching a slower moving car



Approaching a braking car

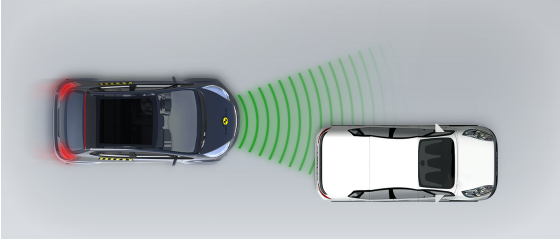


 SAFETY ASSIST

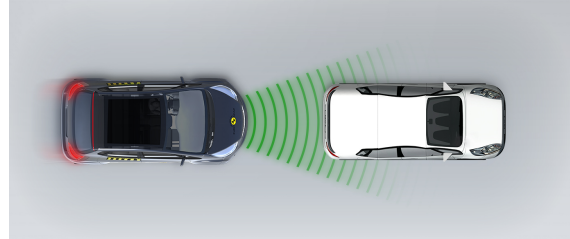
Total 12.3 Pts / 94%

■ Driver reacts to warning

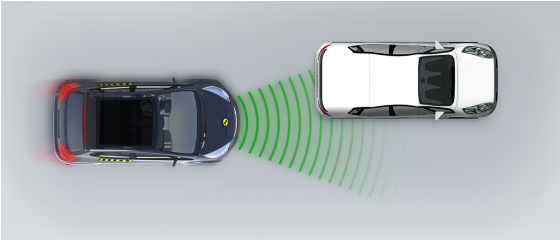
Approaching a stationary car



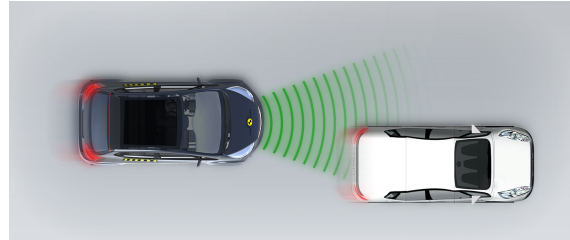
Approaching a stationary car



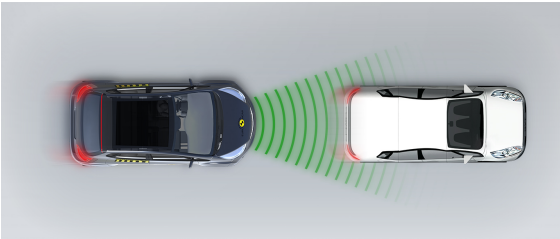
Approaching a stationary car



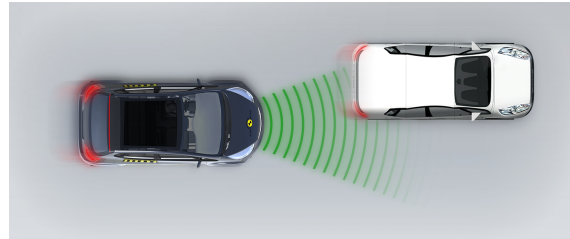
Approaching a slower moving car



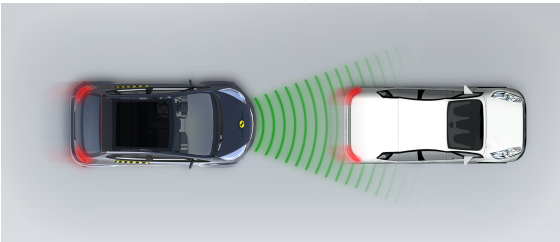
Approaching a slower moving car



Approaching a slower moving car



Approaching a braking car



RATING VALIDITY

Variants of Model Range

Body Type	Engine	Model Name/Code	Drivetrain	Rating Applies	
				LHD	RHD
5 door SUV	Electric Motor	Standard Range Long Range* Performance	4 x 4	✓	✓

* Tested variant

Annual Reviews and Facelifts

Date	Event	Outcome
December 2019	Rating Published	2019 ★★★★★ ✓